

# **14" Z-SERIES BANDSAW**

# MODEL G1019Z



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WARNING

- Lead from lead-based paints.
- Crystalline silica from bricks, cement, and other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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#### For Your Own Safety Read Instruction Manual Before Operating This Equipment

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words which are intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.



NOTICE

Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

This symbol is used to alert the user to useful information about proper operation of the equipment.

#### AWARNING Safety Instructions For Power Tools

- 1. KEEP GUARDS IN PLACE and in working order.
- 2. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on.
- **3. KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
- DON'T USE IN DANGEROUS ENVIRON-MENT. Don't use power tools in damp or wet locations, or where any flammable or noxious fumes may exist. Keep work area well lighted.

- 5. KEEP CHILDREN AND VISITORS AWAY. All children and visitors should be kept a safe distance from work area.
- 6. MAKE WORKSHOP CHILD PROOF with padlocks, master switches, or by removing starter keys.
- 7. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
- 8. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.

## **A**WARNING Safety Instructions For Power Tools

9. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. Conductor size should be in accordance with the chart below. The amperage rating should be listed on the motor or tool nameplate. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Your extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords if they become damaged.

	LENGTH			
AMP RATING	25ft	50ft	100ft	
0-6	18	16	16	
7-10	18	16	14	
11-12	16	16	14	
13-16	14	12	12	
17-20	12	12	10	
21-30	10	10	No	

Minimum Gauge for Extension Cords

- **10. WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
- 11. ALWAYS USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- **12. SECURE WORK.** Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

- **13. DON'T OVERREACH.** Keep proper footing and balance at all times.
- 14. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
- **15. DISCONNECT TOOLS** before servicing and changing accessories, such as blades, bits, cutters, and the like.
- 16. REDUCE THE RISK OF UNINTENTION-AL STARTING. Make sure switch is in off position before plugging in.
- **17. USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
- **18. CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- **19. NEVER LEAVE TOOL RUNNING UNAT-TENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

## **A**WARNING

#### **Additional Safety Instructions For Bandsaws**

- 1. DO NOT OPERATE WITH DULL OR BADLY WORN BLADES. Dull blades require more effort to use and are difficult to control. Inspect blades before each use.
- 2. NEVER POSITION FINGERS OR THUMBS IN LINE WITH THE CUT. Serious personal injury could occur.
- 3. DO NOT OPERATE THIS BANDSAW WITHOUT WHEEL, PULLEY, AND BLADE GUARDS IN PLACE.
- 4. WHEN REPLACING BLADES, make sure teeth face down toward the table. The force of the cut is always down. Make sure the blade is properly tensioned.
- 5. CUTS SHOULD ALWAYS BE FULLY SUPPORTED by the table or some type of support fixture. Always support round stock in a V-block.
- 6. DO NOT BACK WORKPIECE AWAY from the blade while the saw is running. Plan your cuts so you always cut out of the wood. If you need to back the work out, turn the bandsaw off and wait for the blade to come to a complete stop. Do not twist or put excessive stress on the blade while backing work away.

- ALWAYS FEED STOCK EVENLY AND SMOOTHLY. Do not force or twist blade while cutting, especially when sawing small radii.
- 8. THIS MACHINE IS NOT DESIGNED TO CUT METAL or other material except wood.
- 9. BLADE SHOULD BE RUNNING AT FULL SPEED before beginning a cut.
- 10. DO NOT MANUALLY STOP OR SLOW BLADE after turning the saw off. Allow it to come to a complete stop before you leave it unattended.
- 11. ALL INSPECTIONS, ADJUSTMENTS, AND MAINTENANCE ARE TO BE DONE WITH THE POWER OFF and the plug pulled from the outlet. Wait for all moving parts to come to a complete stop.
- 12. HABITS GOOD AND BAD ARE HARD TO BREAK. Develop good habits in your shop and safety will become second nature to you.

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Like all power tools, there is danger associated with bandsaws. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this tool with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

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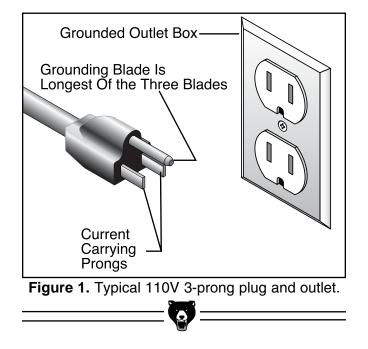
No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment or poor work results.

# **SECTION 2: CIRCUIT REQUIREMENTS**

#### **110V Operation**

The G1019Z Bandsaw motor is prewired to operate at 110V. **See Figure 1.** Under normal 110V use, the motor draws approximately 12 amps. We recommend a 15 amp circuit breaker or a 15 amp slow-blow fuse.

We also recommend that the circuit you use should be dedicated, (i.e., the G1019Z should provide the only draw from that circuit). If frequent circuit failures occur when using the bandsaw, contact our Service Department or your local electrical contractor.

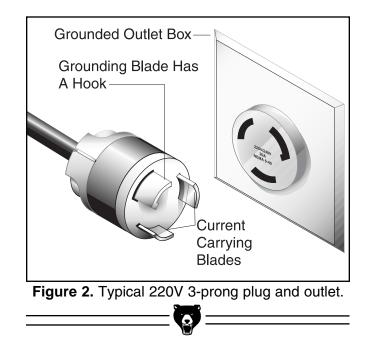


#### **220V Operation**

The motor supplied with the G1019Z can be operated at either 110V or 220V. The motor comes prewired for 110V.

If converting to operate at 220V, a suitable 220V plug must be wired in. Refer to the wiring diagram insert supplied with this manual. When operating at 220V, we recommend using a NEMA-style 6L-15 plug and outlet. **See Figure 2**. Check the electrical codes in your area for specifics on wiring requirements.

Under normal use, the motor draws approximately 6 amps @ 220V. We recommend a 10 amp circuit breaker. This should be satisfactory for normal use while providing enough protection against damage caused by power surges.



#### **Extension Cords**

Grounding

Should it be necessary to use an extension cord, make sure the cord is rated Hard Service (grade S) or better. Refer to chart in the Safety Instructions section to determine the minimum gauge for the extension cord. The extension cord must also contain a ground wire and plug pin. Always repair or replace extension cords when they become worn or damaged.

We do not recommend the use of extension cords on 220V equipment. It is much better to arrange the placement of your equipment and the installed wiring to eliminate the need for extension cords.



This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. Under no circumstances should the grounding pin from any three-pronged plug be removed. Serious injury may occur. In the event of an electrical short, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Improper connections of the electrical-grounding conductor can result in risk of electric shock. The conductor with green or green and yellow striped insulation is the electrical grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment grounding conductor to a live terminal.

## 

We have covered some basic electrical requirements for the safe operation of your Bandsaw. These requirements are not necessarily comprehensive. You must be sure that your particular electrical configuration complies with local and state codes. Ensure compliance by checking with your local municipality or a licensed electrician.



# **SECTION 3: INFORMATION**

#### Commentary

Grizzly Industrial, Inc. is proud to offer the Model G1019Z 14" Bandsaw. The G1019Z is part of Grizzly's growing family of fine woodworking and metalworking machinery. When used according to the guidelines stated in this manual, you can expect years of trouble-free, enjoyable operation, and proof of Grizzly's commitment to customer satisfaction.

The Model G1019Z is intended for home and medium-duty professional use. The G1019Z features cast iron construction for rigidity and strength, a solid cast iron table, an open steel stand, fence and miter gauge. A 2" dust port and ½" blade are also included. The electrical package consists of a 3450 R.P.M., 1 H.P. capacitor start motor, locking toggle switch and cord set. All running parts utilize shielded ball bearings, which require no lubrication for the life of the bearings.

We are also pleased to provide this manual with the Model G1019Z. It was written to guide you through assembly, review safety considerations, and cover general operating procedures. It represents our effort to produce the best documentation possible. If you have any comments regarding this manual, please write to us at the address below.

> Grizzly Industrial, Inc. c/o Technical Documentation P.O. Box 2069 Bellingham, WA 98227-2069

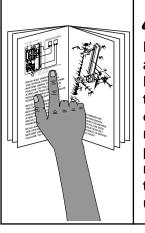
Above all else, we stand behind our machines. We have an excellent service department at your disposal should the need arise. If you have any service questions or parts requests, please call or write to us at the location listed below.

> Grizzly Industrial, Inc. 2406 Reach Road Williamsport, PA 17701 Phone:(570) 546-9663 Fax:(800) 438-5901 E-Mail: techsupport@grizzly.com Web Site: www.grizzly.com

Address after fall 2001:

Grizzly Industrial, Inc. 1203 Lycoming Circle Pennsdale, PA 17756

The specifications, drawings, and photographs illustrated in this manual represent the Model G1019Z as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly. Whenever possible, though, we send manual updates to all owners of a particular tool or machine. Should you receive one, we urge you to insert the new information with the old and keep it for reference.



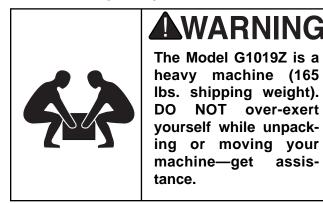
## WARNING

Read the manual before assembly and operation. Become familiar with the machine and its operation before beginning any work. Serious personal injury may result if safety or operational information is not understood or followed.

## Unpacking

The Model G1019Z Bandsaw is shipped from the manufacturer in a carefully packed carton. If you discover the machine is damaged after you've signed for delivery, *please call Customer Service immediately for advice*.

Save the containers and all packing materials for possible inspection by the carrier or their agent. *Otherwise filing a freight claim can be difficult.* 



When you are completely satisfied with the condition of your shipment, you should inventory its parts.



#### **Piece Inventory**

After all the parts have been removed from the carton, you should have:

- Stand Assembly
  - 4 Stand Legs
  - 1 Stand Top
  - 2 Upper Stand Braces
  - 2 Lower Stand Braces (Short)
  - 2 Lower Stand Braces (Long)
- Motor
- Motor Pulley
- Bandsaw Unit
- Table
- Table Bracket
- Fence
- Fence Rail
- Fence Lock Knob
- Miter Gauge

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Hardware Bag #1	Qty
Rubber Feet	4
Table Insert	1
Table Trunnion Knobs	2
Fender Washers 1/4"	3
Lock Washers 5/16"	3
Cap Screws 1/4" - 20 x 1"	3
Key 5 x 5 x 25mm	1
Nut ¾" - 16	1
Bolt <sup>3</sup> / <sub>8</sub> " - 16 x 2 <sup>1</sup> / <sub>2</sub> "	1
Setscrew 1/4" - 20 x 1/4"	1
Roll Pin 3 x 10mm	1
Allen <sup>®</sup> Wrench 3mm	1
Allen <sup>®</sup> Wrench 5mm	1
Hardware Bag #2	Qty
Cap Screws 1/4" - 28 x 11/8"	2
Fence Spacers	2
Carriage Bolts 5/16" - 18 x 3/4"	32
Nuts <sup>5</sup> / <sub>16</sub> " - 18	32
Nuts 3/8" - 16	4
Flat Washers 3/8"	8

In the event that any parts are missing, we will be happy to replace them. Contact our Customer Service number for assistance. If any non-proprietary parts such as nuts, bolts or washers are missing, we will be happy to replace these too, but for the sake of expediency, these items can be obtained at your local hardware store.

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Flat Washers 5/16"

Bolts 3/8" - 16 x 1"



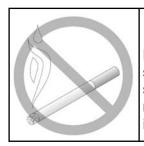
## Clean up

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser such as Grizzly's G7895 Degreaser. Avoid chlorine-based solvents as they may damage painted surfaces should they come in contact. Always follow the usage instructions on the product you choose for clean up.



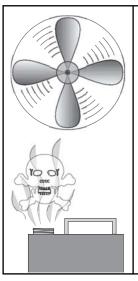
AWARNING Do not use gasoline or

other petroleum-based solvents to clean with. They have low flash points which makes them extremely flammable. A risk of explosion and burning exists if these products are used. Serious personal injury may occur.



#### **AWARNING** Do not smoke while using

solvents. A risk of explosion or fire exists and may result in serious personal injury.



A CAUTION Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Always work in wellventilated areas far from potential ignition sources when dealing with solvents. Use care when disposing of waste rags and towels to be sure they do not create fire or environmental hazards.

#### FLOOR LOAD

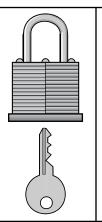
Your G1019Z Bandsaw represents a moderately large weight load in a small footprint. Most commercial or home shop floors should be sufficient to carry the weight of the G1019Z. If you question the strength of your floor, you can opt to reinforce it.

#### WORKING CLEARANCES

Working clearances can be thought of as the distances between machines and obstacles that allow safe operation of every machine without limitation. Consider existing and anticipated machine needs, size of material to be processed through each machine, and space for auxiliary stands and/or work tables. Also consider the relative position of each machine to one another for efficient material handling. Be sure to allow yourself sufficient room to safely run your machines in any foreseeable operation.

#### LIGHTING AND OUTLETS

Lighting should be bright enough to eliminate shadow and prevent eye strain. Electrical circuits should be dedicated or large enough to handle combined motor amp loads. Outlets should be located near each machine so power or extension cords are not obstructing high-traffic areas. Be sure to observe local electrical codes for proper installation of new lighting, outlets, or circuits.



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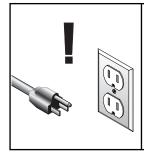
Make your shop "child safe." Ensure that your workplace is inaccessible to children by closing and locking all entrances when you are away. Never allow visitors in your shop when assembling, adjusting or operating equipment.

# **SECTION 4: ASSEMBLY**



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Keep clothing rolled up and out of the way of machinery and keep hair pulled back.



#### 

Disconnect power to the machine when performing any maintenance or assembly. Failure to do this may result in serious personal injury.



#### 

Wear safety glasses during the entire assembly process. Failure to comply may result in serious personal injury.



Some metal parts may have sharp edges on them after they are formed. Please examine the edges of all metal parts before handling them. Failure to do so could result in injury.

## **Beginning Assembly**

Most of your G1019Z Bandsaw has been assembled at the factory, but some parts must be assembled or installed after delivery. We have organized the assembly process into steps. Please follow along in the order presented here.

**TOOLS REQUIRED:** You will need an adjustable square, 10mm, 12mm and 14mm open end wrenches and a Phillips<sup>®</sup> and regular screwdriver.



#### Stand

To begin stand assembly, keep all the stand parts within easy reach. To ease assembly, build the stand upside down on a bench and then place it upright on the floor.

- 1. Place the stand top upside down on your bench.
- Attach each of the four legs to the stand top with carriage bolts, washers and nuts provided. Do not over tighten. The legs attach to the outside of the stand top. See Figure 3.
- **3.** Position the two upper stand braces and finish installing the carriage bolts. Do not over tighten.
- Attach each of the four braces to the stand legs with carriage bolts, washers and nuts provided. Do not over tighten. The braces attach to the inside of the legs. See Figure 3.



Figure 3. Completed stand assembly.

- **5.** Press one  $\frac{5}{16}$ "-18 x  $\frac{1}{2}$ " hex bolt into each rubber foot. Use the washers and nuts supplied to attach a rubber foot onto each of the stand legs.
- 6. Flip the stand right side up and place on the floor. Check to see if the stand is symmetrical from two adjacent sides. Adjust if necessary and tighten all nuts.

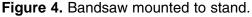


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This bandsaw is relatively heavy and awkward to handle. We strongly recommend that you get assistance. The bandsaw unit is also very unstable until it is permanently mounted to the stand. Use care so the bandsaw unit does not tip.

- **1.** Place the bandsaw on the stand and align the four holes in the base over the four mounting holes in the stand.
- 2. Secure the bandsaw base to the stand with the four hex bolts, nuts and washers provided. See Figure 4.





The motor attaches to the back of the lower bandsaw unit. To install the motor:

- 1. Slide the motor pulley onto the motor shaft so the larger diameter pulley is closest to the motor. Line up the keyways and slide the key into the keyway. Insert the setscrew and tighten. Pulley alignment will be done in Step 5.
- 2. Support the motor and insert the motor pulley through the hole in the back of the bandsaw unit.
- 3. Align the mounting holes and attach each of three cap screws, lock washers and fender washers through the bandsaw unit and into the motor. Leave the cap screws loose for motor adjustment. See Figure 5.
- 4. Slip the V-belt onto the grooves of the wheel and motor pulleys. Remember, this is a two speed bandsaw. Be sure that the pulleys you choose are aligned. Do not try to force the V-belt onto non-aligned grooves. See "Changing Speeds" in the Operations section to select the proper speed.

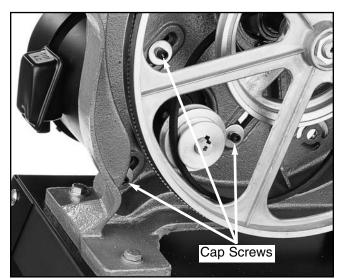


Figure 5. Cap screws securing motor.

5. Check for proper pulley alignment by placing a straightedge on the outside edge of the upper pulley so that it overlaps the motor pulley. If the straightedge touches both pulleys evenly, the pulleys are aligned. If the straightedge does not touch both pulleys evenly, the pulleys are not aligned. Loosen one or both of the pulley setscrews on their shafts and slide the pulleys toward alignment. Remember to retighten the setscrews when finished. See Figure 6.

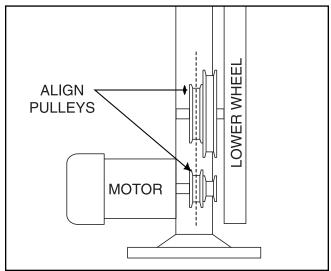
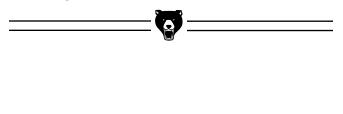


Figure 6. Schematic of proper pulley alignment.

- **6.** Adjust V-Belt tension by sliding the motor along the mounting slots. Proper tension is achieved when the belt can be deflected roughly <sup>1</sup>/<sub>2</sub>" with moderate finger pressure.
- 7. Tighten the socket head cap screws securely. Recheck belt tension and pulley alignment.



#### Switch

The switch is premounted on the bandsaw unit and features a lock-out key. To lock-out the switch, move the switch to the off position and then pull out the key. **See Figure 7a**. The bandsaw cannot be turned on without first inserting the key back into the switch.

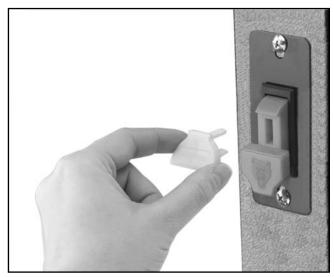


Figure 7a. Switch lock-out key.

To connect the switch to the motor:

1. Plug the male end into the female end as shown in **Figure 7b**.



Figure 7b. Connecting switch to motor.

# Table and Table Support Bracket

The bandsaw table secures to the table trunnions. The trunnions mount to the table support bracket and the table support bracket mounts to the bandsaw unit. The trunnions are premounted to the table. To mount the bandsaw table:

- **1.** Remove the two table support bracket mounting bolts from the bandsaw body.
- 2. Insert the alignment pin that positions the table support bracket to the bandsaw body. Place the table bracket on the body over the alignment pin and secure it to the bandsaw with the two bolts. See Figure 8.

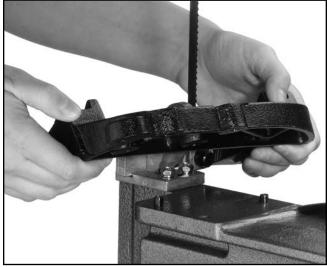


Figure 8. Aligning bracket on the pins.

- 3. Thread the locknut onto the table stop bolt and thread the bolt into the table support bracket. See Figure 9. Bolt adjustments are covered in the "Table Adjustments" section beginning on page 18.
- 4. Remove tapered pin from the table.
- 5. Slip the table past the blade through the table slot, rotate the table 90°, and set the table trunnions onto the bracket. Make sure the trunnion bolts drop through the support bracket.

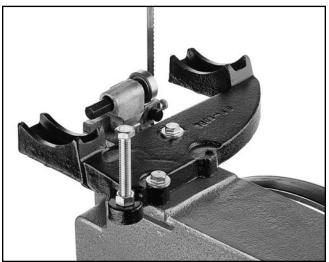


Figure 9. Stop bolt assembled on bracket.

6. Secure the table to the support bracket by securing the two trunnion knobs onto the trunnion bolts. Remember to position the table so that the miter slot is to the right of the blade as you face the front of the band-saw. See Figure 10.

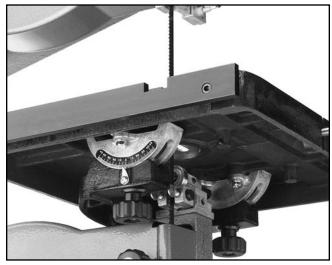


Figure 10. Positioning table on support bracket.

**7.** Place the table insert in the table top and place the tapered pin so it fits snugly in the hole on the side of the table. Do not use excessive force.

#### NOTICE

The tapered table pin must be in position in the table when operating the bandsaw. This maintains the table surface flush with no edge for the workpiece to catch on. When installing the fence, notice that the front edge of the table has two threaded holes. These holes accept the round spacers and socket head cap screws that attach the fence rail to the table.

1. Secure the fence rail to the table with the two socket head cap screws and spacers provided. Ensure that the slot in the rail lines up with the miter gauge slot in the table. See Figure 11.

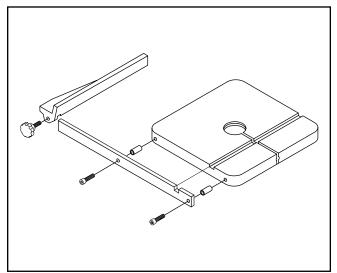
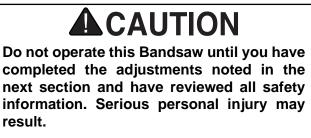


Figure 11. Fence assembly schematic.

- **2.** Mount the fence on the left side of the blade by setting the fence onto the table and rail.
- **3.** Insert and tighten the fence locking knob to secure the fence at the desired distance from the blade.

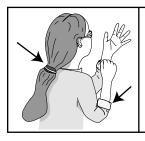
A <sup>1</sup>/<sub>2</sub>" blade is included with the bandsaw and is already installed on the machine. Refer to "Blade Tensioning" and "Blade Tracking" on pages 16 and 17 before starting the machine. Also, the Operations section contains instructions on selecting and changing blades.

This concludes the assembly process. Please DO NOT operate this saw until you have read this entire manual.



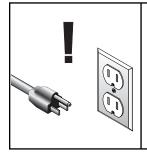


# **SECTION 5: ADJUSTMENTS**



#### WARNING

Keep clothing rolled up and out of the way of machinery and keep hair pulled back.



#### **AWARNING** Disconnect power to the

machine when performing any maintenance or assembly. Failure to do this may result in serious personal injury.



#### WARNING

Wear safety glasses during the entire adjustment process. Failure to comply may result in serious personal injury.

## General

General control and adjustment locations are shown in **Figures 12, 13 & 14** and are described below.

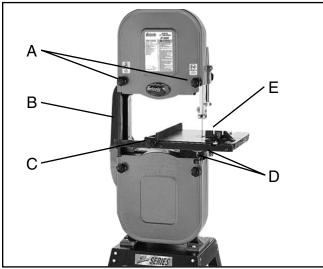


Figure 12. Location of controls.

- A. These two knobs secure the upper and lower wheel covers. The covers should only be opened to change a blade or make an adjustment to blade tracking. Always disconnect power before opening.
- **B.** This is the paddle switch that controls the motor. To turn the motor on, flip the paddle to the up position. To turn the motor off, push the paddle to the down position.
- **C.** This knob locks the rip fence in position.
- **D.** These trunnion knobs are used to lock the table in position.
- **E.** The miter gauge slides in the milled groove in the table and can be set at 45° left and right. Use the miter gauge for crosscutting and miter-cutting.

Now, direct your attention to the controls located around the backside of the upper cover of the saw. **See Figure 13.** 

- **F.** This knob is used to control blade tension. Turning clockwise increases tension; counter-clockwise decreases tension.
- **G.** This knob controls blade tracking. Note that the knob has a locknut to lock tracking in place.

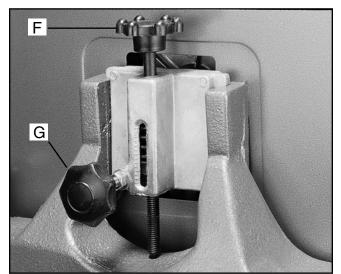


Figure 13. Blade tension and tracking controls. Model G1019Z 14" Bandsaw

#### WARNING

Do not make adjustments while the bandsaw is running. Ensure that the switch is off, power is disconnected, and moving parts have stopped before making adjustments. Check adjustments while power is still disconnected by manually turning the bandsaw wheel by hand.

The controls for the blade guide are shown in **Figure 14.** The blade guide should always be positioned so there is minimal space between the guide and the top of the workpiece.

- H. This knob locks the upper blade guide assembly in position. The upper guide should be adjusted to within ¼" of the workpiece for optimum blade support. Do not operate bandsaw without locking the guide post knob.
- I. These spring-loaded bolts apply pressure against the U-clamp to prevent the guide post from dropping when the upper blade guide knob is loosened.

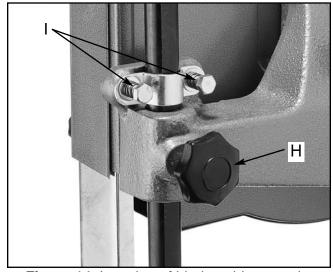


Figure 14. Location of blade guide controls.

#### **Blade Tension**

Proper blade tension is important for optimum bandsaw performance. **See Figure 13** for bandsaw tension controls. To increase blade tension, turn the blade tension knob clockwise. To reduce blade tension, turn the blade tension knob counter-clockwise.

Since a variety of blades will work well with this saw, final blade tension ultimately depends on the type and size of blade you use. Thin blades require less tension than wide blades. Too much tension will result in blade breakage.

A properly tensioned blade will track the cutting line accurately and the cut will be smoother.

Proper blade tension can best be achieved by determining the amount of blade deflection:

- 1. Ensure that the power is off and the saw is unplugged. Raise the upper guide assembly all the way and lock in place.
- **2.** Press, with moderate pressure, on the face of the blade with your thumb.
- **3.** Turn the tensioning knob to adjust the amount of tension. The blade should deflect about <sup>1</sup>/<sub>4</sub>".

If the tension seems correct, make all of the other adjustments to the saw and test run it. If the blade is not cutting properly, the tension may be incorrect and readjustment may be needed.

Remember to reduce the blade tension when the bandsaw is not in use, this will help prevent premature breakage of the blade and deformation of the rubber tires.



The blade should track so the body of the blade is centered on the upper wheel and tire. The rubber tire is slightly crowned in the middle which helps keep the blade centered and avoids having the teeth of the blade come in contact with the tire material. **See Figure 13** for bandsaw tracking controls.

To adjust blade tracking:

- 1. Disconnect the bandsaw from the power source.
- **2.** Adjust the upper and lower guide blocks and support bearings away from the blade.
- 3. Loosen the locknut on the tracking control knob and turn the knob clockwise or counter-clockwise while turning the upper wheel by hand. When turning the wheel by hand, ensure that there are no sharp edges to cut your hand.
- 4. Turn the upper wheel and tracking knob until the blade is centered on the upper wheel and tire. Turn the wheel at least three more full turns to ensure that the blade is tracking in its final position.
- **5.** Retighten the locknut and double check blade tracking.
- 6. Install the upper wheel cover.

## 

The bandsaw blade is dangerously sharp. Use extreme caution when working near the saw blade. Failure to exercise care could result in severe injury.



## **Blade Guides**

Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and guide blocks must be re-adjusted. Always adjust the assemblies away from the blade before installing a new blade or making blade tracking adjustments. After blade tension and tracking are set correctly, re-adjust the upper and lower support bearings and guide block assemblies into position. **See Figure 15** for upper blade guide and **Figure 16** for lower blade guide.

#### **Support Bearings**

The support bearings back-up the blade during the sawing operation. To adjust the support bearings, loosen the thumbscrews securing the support bearing shafts. **See Figure 17.** Adjust the shafts in or out so that the upper and lower support bearings are within 1/64" of the back edge of the blade. Retighten the thumbscrews.

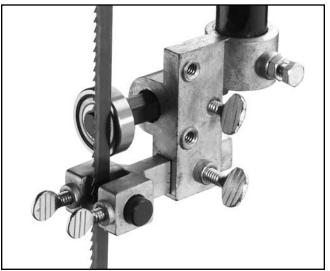


Figure 15. Upper blade guide assembly.

#### **Eccentric Guide Post**

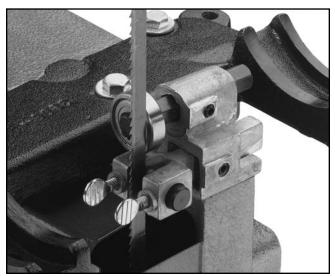
There is an eccentric on the lower end of the guide post where the the guide assembly attaches. This is held to the post by a setscrew and can be loosened and tightened with an Allen<sup>®</sup> wrench. **Figure 15A.** 

The eccentric allows the upper blade guide assembly to be moved to accommodate various blade sizes and wheel configurations.

Loosen the knob on the guide post. Rotate the guide block assembly on the guide post so the blade is directly in the center of the guide block legs. Retighten the knob and make sure the assembly didn't move. If needed, adjust the eccentric on the post to make the assembly accommodate the blade.



Figure 15A. Eccentric guide post.

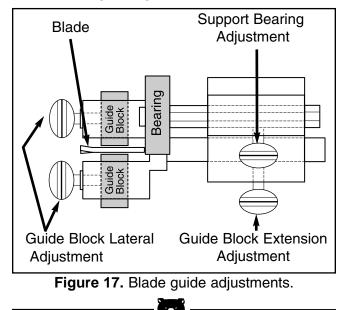


**Figure 16.** Lower blade guide assembly. Model G1019Z 14" Bandsaw

#### Guide Blocks

For optimum support, the guide block assemblies should be adjusted so they are just behind the gullet line (the hollow points) of the blade. To adjust the guide block assemblies, loosen the thumbscrews securing the guide block yoke assemblies. Move in or out in relation to the blade gullets. Once adjusted, retighten the thumbscrew.

Now adjust the guide blocks. Loosen the guide block thumbscrews and adjust each block so it is about 0.004" from the blade. This is about the same thickness as a piece of typing paper. Retighten the thumbscrews and turn the upper wheel by hand through a complete revolution of the blade length to ensure that the blade weld passes through the guide blocks unhindered.



## **Table Adjustments**

The bandsaw table will tilt left  $10^{\circ}$  and right  $45^{\circ}$  from horizontal. When tilting the table to the right, the positive stop adjusting bolt automatically indexes the table perpendicular to the blade.

To tilt the table to the right:

- 1. Loosen the two trunnion knobs below the table trunnions. See Figure 18 for location.
- **2.** Position the table to the desired angle. Refer to the angle gauge on the front table support trunnion.
- **3.** Tighten the trunnion knobs.

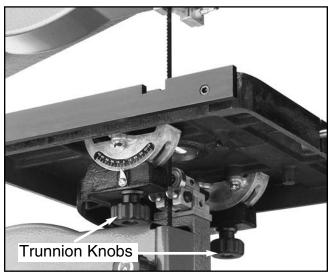


Figure 18. Table tilt trunnion knobs.

To tilt the table to the left:

- **1.** Loosen the two trunnion knobs below the table trunnions.
- 2. Tilt the table to the right enough to gain clearance to the positive stop bolt. Loosen the lock nut, then remove the positive stop bolt.
- **3.** The table will now tilt left to approximately 10°. See Figure 19.
- **4.** When the left tilt operation is complete, reinstall the positive stop bolt.

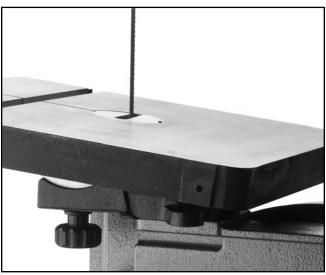


Figure 19. Table tilted left.

To adjust the positive stop so the table will be perpendicular (90°) to the blade:

- **1.** Loosen two trunnion knobs and the locknut securing the positive stop adjusting bolt.
- Raise the upper blade guide assembly and place a 6" adjustable square or try-square on the table against the blade. See Figure 20. Adjust the positive stop adjusting bolt so that the table is positioned at a 90° angle to the blade.
- 3. Secure the trunnion knobs and lock the positive adjusting bolt by tightening the locknut. Ensure that the bolt does not turn while tightening the locknut. Set the angle pointer to zero for future reference.

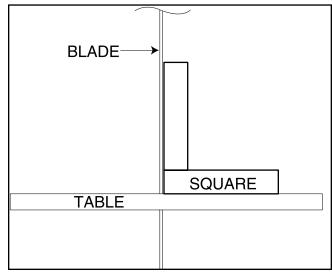


Figure 20. Squaring table to blade.

The table can be shifted side to side to properly align the miter slot and the blade:

**Blade Lead** 

- 1. Loosen the 6 trunnion bolts underneath the table.
- 2. Use the largest width blade available installed in the machine. Lay a straightedge along side the blade and inspect it closely to make sure it is parallel to the blade. Make sure there is no deflection of the blade from the straightedge. Measure the distance between the edge of the miter gauge slot and the straightedge at points A and B. See Figure 21. Distance A should be approximately equal to distance B. Adjust the table slightly until these distances are equal.
- 3. Secure the table and ensure that unwanted shifting did not occur during retightening. After all adjustments are made, cut a test piece of wood using the miter gauge and measure to see if the cut was square. If it wasn't, adjust the table accordingly until you can cut a test piece of wood square.

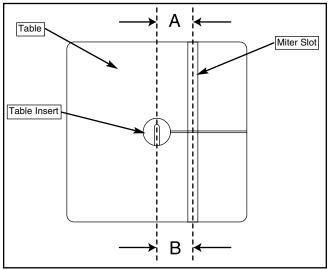


Figure 21. Squaring table to blade.

The table should also be 90° to the back of the blade. If the table is not perpendicular to the back of the blade, shim the table in the desired direction with washers. Remove the trunnion bolts and add washers between the table and trunnion so the table tilts in the desired direction. Electrical washers are very thin and will allow fine adjustment.



Blade lead occurs when you are attempting a straight cut and the blade wanders to one side or the other. This usually happens (1) if the blade tension isn't correct, (2) if the teeth are dull on one side, or (3) if the teeth are heavier on one side of the blade than the other.

If you don't have time to switch blades or readjust your bandsaw, you can temporarily compensate for blade lead by slightly rotating your table. To do this, rotate the table to match the angle that your blade is leading. Your purpose in doing this is to "trick" your bandsaw into cutting straight.

If you are having blade lead problems with your miter gauge, do the same thing by slightly rotating your table so the miter slot matches the angle that the blade is leading.



-21-

#### **Fence Adjustment**

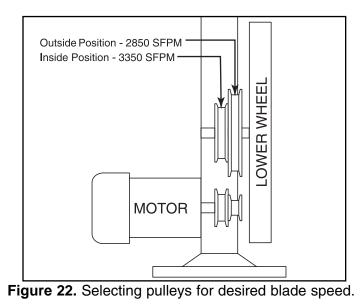
**Test Run** 

Fence operation is controlled by the threaded knob located on the front of the fence. The knob, when screwed tight, locks the fence to the front rail. To change the fence position, loosen the knob and slide the fence along the rail. Use a tape measure or ruler to position the fence from the blade.



#### **Speed Changes**

Loosen the motor mounting bolts and move the motor accordingly to slacken the V-Belt. It should now be easy to move the belt onto the pulleys of choice. Adjust belt tension and check the alignment according to the instructions in the Adjustments Section. Refer to **Figure 22** to determine which pulley pair is required for the desired blade speed.



Once assembly is complete, adjustments are done to your satisfaction and tools are safely put away, you are ready to test run the machine.

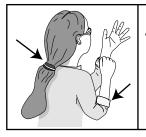
Turn on the power supply at the main panel. Press the switch in the START position. Make sure that your finger is poised on the switch to press in the STOP position, just in case there's a problem. The bandsaw should run smoothly, with little or no vibration or rubbing noises. Strange or unnatural noises should be investigated and corrected before operating the machine further.

If you cannot easily locate the source of an unusual noise or vibration, contact our Service Department for help.



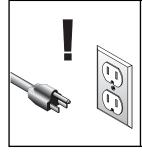
DO NOT attempt to investigate or adjust the machine while it is running. Wait until the machine is turned off, unplugged and all working parts have come to a stop before you do anything! Serious personal injury will result.

# **SECTION 6: OPERATIONS**



#### 

Keep clothing rolled up and out of the way of machinery and keep hair pulled back.



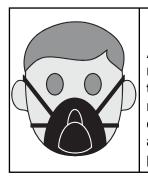
#### 

Disconnect power to the machine when performing any maintenance or assembly. Failure to do this may result in serious personal injury.



#### 

Wear safety glasses during all operations on the shaper. Failure to comply may result in serious personal injury.



#### 

Always wear a dust mask when operating the bandsaw. Using this machine produces sawdust which may cause allergic reactions or respiratory problems.

#### NOTICE

The following section was designed to give instructions on the basic operations of this bandsaw. However, it is in no way comprehensive of every bandsaw application. WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training to maximize the potential of your shaper. There are many different jigs that can be built to increase safety, accuracy, and types of cuts.

## General

There are many interrelated adjustment points to consider when operating this type of saw. Therefore, cutting results can be somewhat unpredictable if some or all of the crucial adjustments are neglected. Here are a few simple things you can do to increase the predictability of your bandsaw's performance:

- 1. Always use a sharp, high-quality blade. Although you might save a few dollars initially, buying a cheap blade will give you cheap results. As a rule, spending more now will save you money later.
- Use the right blade for the job. Resawing with a <sup>1</sup>/<sub>8</sub>" blade or doing scrollwork with a <sup>3</sup>/<sub>4</sub>" blade are extreme examples of using the wrong blade for the job.
- 3. Allow the saw to cut. Don't force the workpiece into the blade. When cutting curves or irregular shapes, remember that while negotiating a curve, the blade should still be cutting the wood. Simply turning the workpiece will only bind the blade and could cause it to break.
- **4.** Maintain your bandsaw in top condition. See Section 7 of this manual for maintenance procedures.



#### **Blade Information**

**Changing Blades** 

A bandsaw blade is a delicate piece of steel that is subjected to tremendous strain. Be sure you use quality blades of the proper width for the various types of cutting operations.

Always use the widest blade possible for the workpiece you are cutting. Use narrow blades only for sawing small, abrupt curves and for fine, delicate work. Bandsaw blades can be purchased welded, set and sharpened ready-for-use from most saw shops. We also supply bandsaw blades in widths of  $1/8^{"}$ ,  $3/16^{"}$ ,  $1/4^{"}$ ,  $3/8^{"}$ ,  $1/2^{"}$ , and  $3/4^{"}$ , for this saw. Please refer to our current catalog for prices and ordering information.

Always use good quality saw blades that are sharp and choose the right blade for the job. Using a dull or poor quality blade, or the wrong size or type, often produces unsatisfactory results

Many conditions may cause blade breakage. Breakage is, in some cases, unavoidable, since it is the natural result of the peculiar stresses to which bandsaw blades are subjected. Blade breakage is also due to avoidable causes. Avoidable breakage is most often the result of poor care or judgement on the part of the operator. The most common causes of blade breakage are: (1) faulty alignment and adjustment of the guides; (2) forcing or twisting a wide blade around a tight curve or short radius; (3) feeding too fast; (4) tooth dullness or absence of sufficient set; (5) excessive blade tension; (6) upper blade guide assembly set too high above the workpiece; (7) using a blade with a lumpy or improperly finished weld; and (8), continuously running the bandsaw when not in use.

The Grizzly G1019Z 14" Bandsaw uses 98" blades.



When removing or installing blades, make sure the power is disconnected and moving parts have come to a complete stop.

To remove the blade:

- 1. Back guide block assemblies and support bearings away from the blade and raise the guide post up and away from the table.
- **2.** Release blade tension by turning the blade tension knob counter-clockwise.
- 3. Remove table insert and tapered table pin.
- 4. Remove top and bottom wheel covers.
- **5.** Loosen the two blade guard mounting bolts and slide the guard off of the mounting studs.
- **6.** Pull blade straight off the wheels, rotate 90° and feed along the table through the table slot.

To install the blade:

- 1. Hold blade in both hands so the teeth of the blade in your right hand are pointing down.
- 2. Feed blade into the slot in the table. Turn the blade 90° and position over the top and bottom wheels. The teeth of the blade must be pointing down toward the table.
- Apply tension to the blade by turning the tension control knob. Rotate the upper wheel slowly by hand as tension is applied to allow the blade to center itself on the wheel. Adjust tracking if needed. See "Blade Tension" and "Blade Tracking" in Section 5 for details.
- **4.** Re-adjust upper and lower blade guides and support bearings as stated in the Adjustment section.

5. Install the table taper pin and table insert.

- 6. Install the blade guard.
- 7. Close the top and bottom covers.

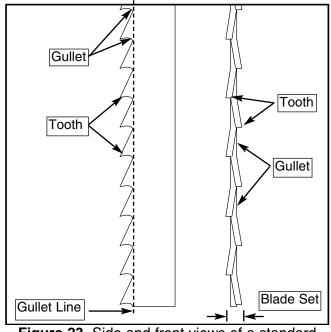


Figure 23. Side and front views of a standard bandsaw blade.

## 

The bandsaw blade is dangerously sharp. Use extreme caution when working near the saw blade. Failure to exercise care could result in severe injury. Ripping is the process of cutting a board into two or more thinner boards, generally in a direction along its length. The maximum board width that can be ripped is limited by the distance between the blade and the support column. Maximum cutting width for this bandsaw is  $14\frac{1}{4}$ ".

Ripping

The important consideration when ripping is blade selection. Generally, the wider the blade, the better. In most applications, a hook or skip tooth style will be sufficient. Also, since most ripped lumber will be planed or sanded smooth, you can choose blades with fewer teeth-per-inch. While blades with fewer teeth-per-inch produce rougher cuts, these types of blades offer larger gullet capacities for clearing sawdust, produce less heat, and yield more horsepower per tooth.

To perform ripping operations:

- **1.** The bandsaw must be adjusted correctly. See "Blade Tension" and "Blade Tracking" in Section 5.
- **2.** The table must be square to the blade. See "Table Adjustment" in Section 5.
- **3.** Use the widest blade available. The blade must also be in good condition.
- 4. Use a fence to guide work.
- 5. Draw a reference line on the edge of the board.
- 6. Support ends of the board if necessary.
- 7. Feed work slowly and evenly.

One of the benefits of a bandsaw is its ability to cut multiple copies of a particular shape by stacking a number of workpieces together.

Before making stacked cuts, it is essential to ensure that both the table and the blade are properly adjusted to 90°. Otherwise, any error will be compounded with each piece cut from the top to the bottom of the stack.

To complete a stacked cut:

- 1. Align your pieces from top to bottom to ensure that each piece has adequate scrap to provide a clean, unhampered cut.
- **2.** Using brads in the waste portion of each piece, secure all the pieces together.
- **3.** Lay out the shape you intend to cut on the face of the top piece.
- **4.** Make relief cuts perpendicular to the outline of your intended shape in areas where changes in blade direction could pinch the blade against the wood.
- 5. Cut the stack as though you were cutting a single piece. Follow your layout line with the blade kerf on the waste side of your line.



When cutting curves, simultaneously feed and turn the stock carefully so that the blade follows the layout line without being twisted. If a curve is so abrupt that it is necessary to repeatedly back up and cut a new kerf, use either a narrower blade or a blade with more set.

Always make short cuts first, then proceed to the longer cuts. Relief cuts will also reduce the chance that the blade will be pinched or twisted. Relief cuts are cuts made through the waste portion of the workpiece and are stopped at the layout line. As you cut along the layout line, waste wood is released from the workpiece, alleviating any pressure on the back of the blade. Relief cuts also make backing the workpiece out easier, if needed. **Figure 24** lists blade widths and corresponding minimum radii each blade will cut.

BLADE WIDTH	MINIMUM RADII
1/8 <b>"</b>	<sup>3</sup> / <sub>16</sub> "
<sup>3</sup> / <sub>16</sub> "	<sup>5</sup> / <sub>16</sub> "
<sup>1</sup> /4"	<sup>5</sup> /8"
3/8"	<b>1</b> <sup>1</sup> / <sub>2</sub> "
<sup>1</sup> /2"	<b>2</b> <sup>1</sup> / <sub>2</sub> "
<sup>5</sup> /8"	4"
3/4"	5 <sup>1</sup> /2"

Figure 24. Minimum circle radius vs. blade size.

#### Resawing

Resawing is the process of cutting a board along its thickness into two or more thinner boards. Each new board is the same width and length as the original board, but the thickness is less. The maximum board width that can be resawn on this bandsaw is  $6^{1}/_{8}$ ".

Although the G1019Z Bandsaw was not specifically designed for resawing, it is capable of resawing, provided the saw is set up properly. Use common sense when resawing; attempting to resaw a board that is too wide or too dense may put excessive strain on the blade and be unsafe.

Again, the important consideration when resawing is blade selection. When selecting a blade, keep in mind that a wider blade is generally easier to control. The blade should be of high quality in order to handle the increased stress. In most applications, a hook or skip tooth style will work fine. Also, since most resawn lumber will be planed smooth, you can choose blades with fewer teeth per inch (3 to 6). These types of blades offer larger gullet capacities for clearing sawdust. They also produce less heat build up and yield more horsepower per tooth.

NOTE: When operating with wide blades, run the bandsaw at the slowest speed.

To resaw lumber, follow the procedure below:

- 1. The blade must be adjusted correctly and the table must be square to the blade. See Section 5.
- Use the widest blade that will fit this saw (<sup>3</sup>/<sub>4</sub>"). The blade must also be in good condition.
- **3.** Use the fence or a pivot block to guide the work. If using a pivot block, clamp the block to the table next to the fence at the desired distance from the blade and mark the line of cut on the workpiece. Follow the mark during cutting while using the pivot block as a guide.
- 4. Feed work slowly and evenly.

When using a fence to guide the board, the actual line of cut may not always be parallel to the fence. In fact, most bandsaw blades will not cut exactly parallel to the fence. There are usually a number of reasons for this: teeth are set heavier on one side than the other, teeth are dull on one side, or blade tension is too tight or too loose.

If the blade wanders off the line of cut when using the fence, consider using a pivot block.

IMPORTANT: Do not force the wood into the blade during cutting. This will distort the blade, cause excessive heat and often results in blade breakage as well as miscut lumber.



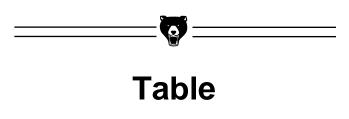
# **SECTION 7: MAINTENANCE**

#### General

Regular periodic maintenance on your Model G1019Z Bandsaw will ensure its optimum performance. Make a habit of inspecting your bandsaw each time you use it. Check for the following conditions and repair or replace when necessary.

- 1. Loose mounting bolts
- 2. Worn switch
- 3. Worn or damaged cords and plugs
- 4. Damaged V-belt
- **5.** Any other condition that could hamper the safe operation of this machine.

Always perform any maintenance with the power off and the machine unplugged.

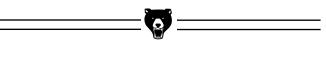


The table can be kept slippery and rust-free with regular applications of talcum powder. Rub the powder into the table top with either a felt brick (i.e.-common chalk board eraser) or a chamois cloth. There are many after-market spray applications available to protect the table surface and ease material handling. See a current Grizzly Industrial catalog for these types of after-market products.



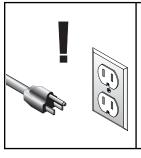
#### Bearings

Since all bearings are shielded and permanently lubricated, no maintenance is required on them. If, after a period of time you notice a distinct noise or rumble coming from a shielded bearing, or the bearing journal is hot to the touch after use, it will be time to replace the shielded bearing assembly(s). Please contact our Customer Service number to order replacement bearings or to make arrangements to send your bandsaw back for service.



#### V-Belt

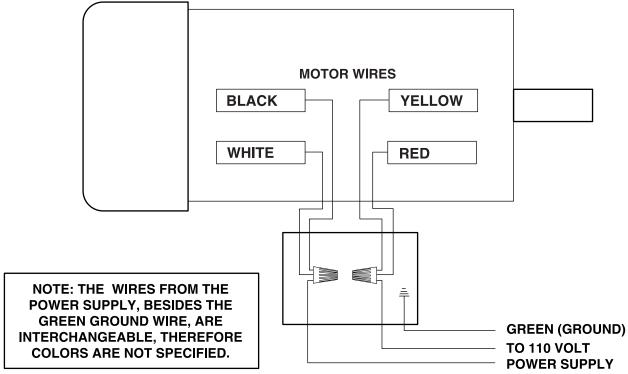
Inspect V-belt regularly for tension and wear. Replace when necessary. Check pulleys to ensure that they are properly aligned and securely tightened. See "Motor Assembly" in Section 4 for proper tension and pulley alignment procedures.



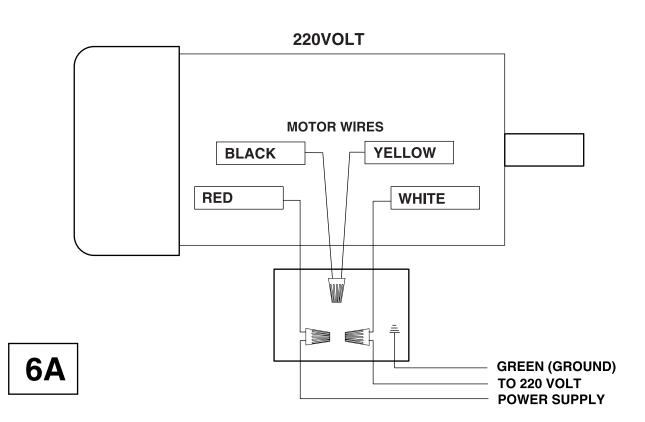
## WARNING

Disconnect power to the machine when performing any maintenance or assembly. Failure to do this may result in serious personal injury.

# **Wiring Diagram**



**110 VOLT** 



# **SECTION 8: CLOSURE**

The following pages contain general machine data, parts diagrams/lists, a troubleshooting guide and Warranty/Return information for your Model G1019Z Bandsaw.

If you need parts or help while assembling your machine, or if you need operational information, we encourage you to call our Service Department. Our trained service technicians will be glad to help you.

If you have comments dealing specifically with this manual, please write to our Bellingham, Washington location using the address in the General Information Section. The specifications, drawings, and photographs illustrated in this manual represent Model G1019Z as supplied when the manual was prepared. However, due to Grizzy's policy of continuous improvement, changes may be made at any time with no obligation on the part of Grizzly.

We have included some important safety measures that are essential to this machine's operation. While most safety measures are generally universal, Grizzly reminds you that each workshop is different and safety rules should be considered as they apply to your specific situation.

#### WARNING

As with all power tools, there is danger associated with the Model G1019Z Bandsaw. Use the tool with respect and caution to lessen the possibility of mechanical damage or operator injury. If normal safety precautions are overlooked or ignored, injury to the operator or others in the area is likely. We recommend you keep a copy of our current catalog for complete information regarding Grizzly's warranty and return policy. If you need additional technical information relating to this machine, or if you need general assistance or replacement parts, please contact our Service Department.

We recommend reviewing additional information sources to realize the full potential of this machine. Trade journals, woodworking magazines, and your local library are good places to start.

## 

The Model G1019Z was specifically designed for wood cutting operations. DO NOT MODIFY AND/OR USE THIS BANDSAW FOR ANY OTHER PURPOSE. Modifications or improper use of this tool will void the warranty. If you are confused about any aspect of this machine, DO NOT use it until you have answered all your questions. Serious personal injury may occur.

## 

Operating this equipment has the potential for flying debris to cause eye injury. Always wear safety glasses or goggles when operating equipment. Everyday glasses or reading glasses only have impact resistant lenses, they are not safety glasses. Be certain the safety glasses you wear meet the appropriate standards of the American National Standards Institute (ANSI).





## MACHINE DATA SHEET

Customer Service #: (570) 546-9663 • To Order Call: (800) 523-4777 • Fax #: (800) 438-5901

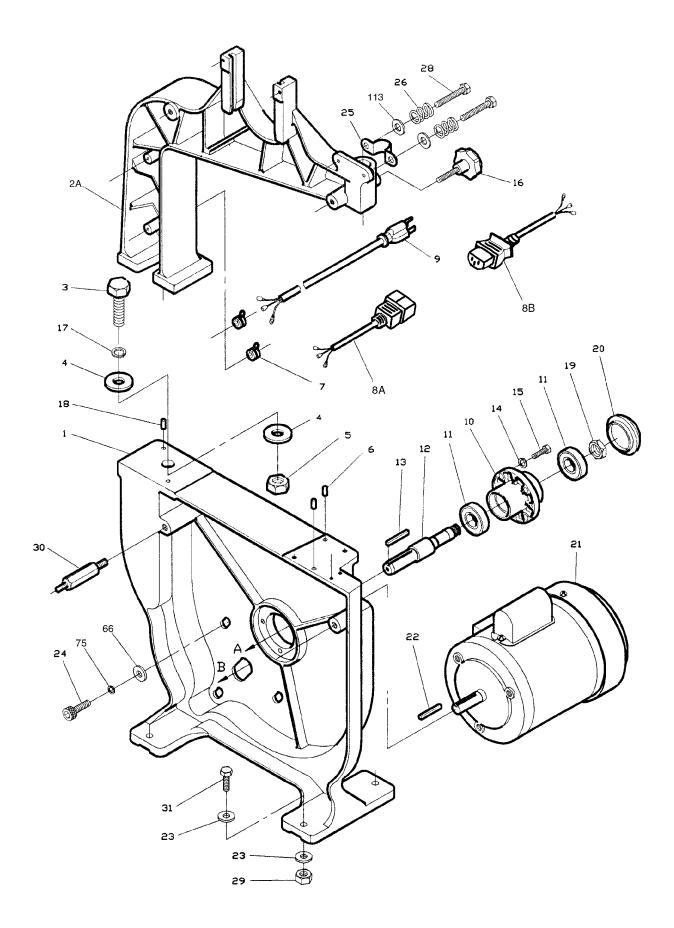
#### GRIZZLY MODEL G1019Z 14" BANDSAW

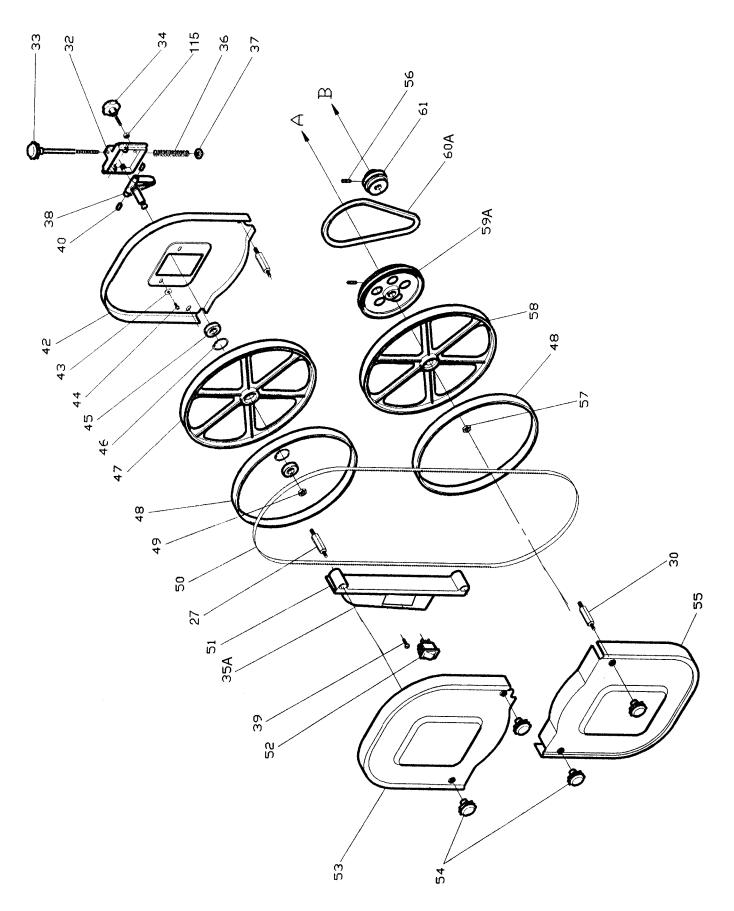
Design TypeFloor Model
Overall Dimensions:
Table
Overall Height
Height From Floor to Table
Width of Unit
Depth of Unit
Shipping Weight
Weight in Place
Box Size
Foot Print
Cutting Capacity:
Left of Blade
Height63%"
Table Tilt
Construction:
TablePrecision Ground Cast Iron
Wheels Whe
Rip FenceCast Iron Fence / Steel and Bar Stock
Wheel CoversPre-Formed Steel
GuidesBear Ball Bearing Support
StandPre-Formed Steel
Motor:
TypeTEFC Capacitor Start Induction
Horsepower1 H.P.
Phase/CycleSingle Phase/60 Hz
Voltage
Amps
Power TransferBelt Drive
R.P.M
BearingsShielded & Permanently Lubricated Ball
SwitchToggle On/Off w/ Safety Lock Tab Blades:
Sizes AvailableFrom 1/8" to 3/4"
Sizes Available
Blade Speeds
Features:
Includes: Fence, Miter Gauge and 1/2" Blade

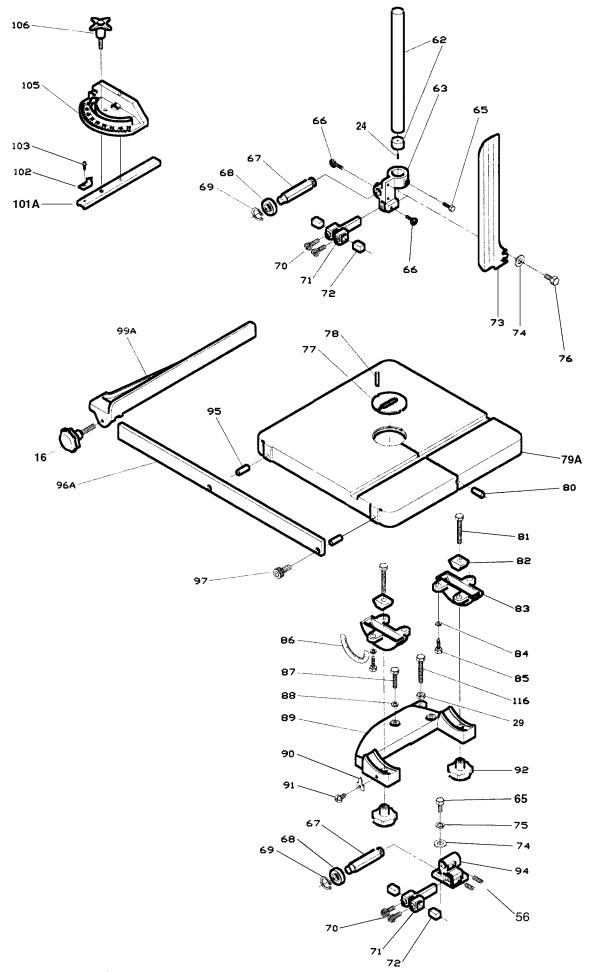
Specifications, while deemed accurate, are not guaranteed.

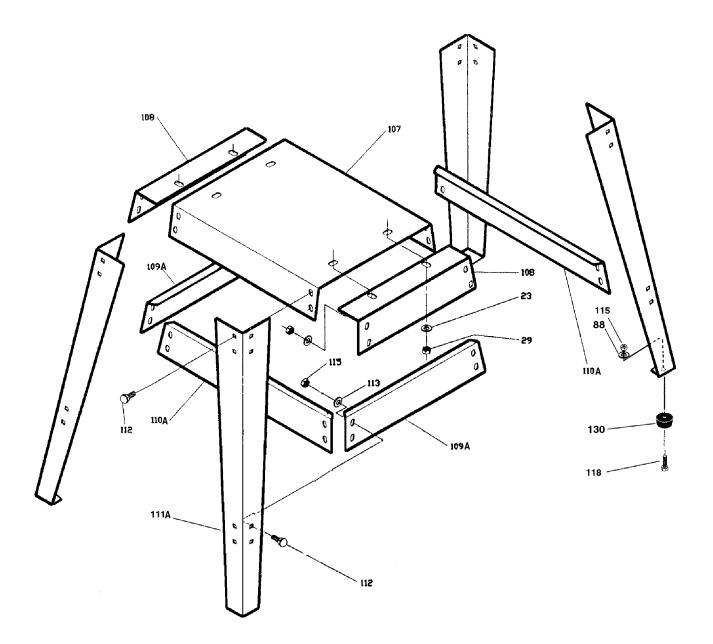
# TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION		
Motor will not start.	<ol> <li>Low voltage.</li> <li>Open circuit in motor or loose connections.</li> </ol>	<ol> <li>Check power line for proper voltage.</li> <li>Inspect all lead connections on motor for loose or open connections.</li> </ol>		
Motor will not start; fuses or circuit breakers blow.	<ol> <li>Short circuit in line cord or plug.</li> <li>Short circuit in motor or loose connections.</li> <li>Incorrect fuses or circuit breakers in power line.</li> </ol>	<ul><li>shorted wires.</li><li>Inspect all connections on motor for loose or shorted terminals or worn insulation.</li></ul>		
Motor overheats.	<ol> <li>Motor overloaded.</li> <li>Air circulation through the motor restricted.</li> </ol>	<ol> <li>Reduce load on motor.</li> <li>Clean out motor to provide normal air circulation.</li> </ol>		
Motor stalls (resulting in blown fuses or tripped circuit).	<ol> <li>Short circuit in motor or loose connections.</li> <li>Low voltage.</li> <li>Incorrect fuses or circuit breakers in power line.</li> <li>Motor overloaded.</li> </ol>	terminals or worn insulation. 2 Correct the low voltage conditions.		
Machine slows when operating.	<ol> <li>Applying too much pressure to workpiece.</li> <li>Blade is dull.</li> </ol>	<ol> <li>Feed workpiece slower.</li> <li>Replace blade.</li> </ol>		
Blade does not run even- ly on wheels or runs off.	<ol> <li>Tracking is not adjusted properly.</li> <li>Rubber tire on wheel is dam- aged or worn.</li> <li>Wheels are not coplanar.</li> </ol>			
Blade does not cut evenly.	<ol> <li>Blade tension is incorrect.</li> <li>Tooth set is uneven.</li> <li>Teeth are sharper on one side than the other.</li> </ol>	<ol> <li>Adjust tension.</li> <li>Replace blade, or have it professionally sharpened.</li> <li>Replace blade, or have it professionally sharpened.</li> </ol>		
Ticking sound when the saw is running.	<ol> <li>Blade weld contacting sup- port bearing.</li> <li>Blade weld may be failing.</li> </ol>	<ol> <li>Use file or stone to smooth and round the back of the blade.</li> <li>Inspect and replace blade if necessary.</li> </ol>		
Blade contacting table insert.	<ol> <li>Excessive side pressure when cutting.</li> <li>Table improperly adjusted.</li> </ol>	<ol> <li>Reduce side pressure.</li> <li>Adjust table.</li> </ol>		
Excessive vibration.	<ol> <li>Wheels not coplanar.</li> <li>Tires incorrectly installed.</li> <li>Bent or worn out blade.</li> <li>Wheels out of balance.</li> </ol>	<ol> <li>Adjust wheels coplanar.</li> <li>Re-install tires.</li> <li>Replace blade.</li> <li>Replace wheels.</li> </ol>		
Burn marks on the edge of the cut.	<ol> <li>Too much side pressure when feeding workpiece.</li> <li>Blade too wide for size of radius being cut.</li> </ol>			
		<u> </u>		









# PARTS LIST

DEE	PART #	DESCRIPTION
	P1019Z001 P1019Z002A	BODY
		HEX BOLT 5/8"-11 x 21/2"
	PW14	WASHER 5%"
		HEX NUT <sup>5</sup> / <sub>8</sub> "-11
	PN06 P1019Z006	PIN 6 x 16
		CORD HOLDER 1/2"
		POWER CORD W/PLUG
		POWER CORD W/FLOG
		POWER CORD 110V, LONG
	P1019Z010	BEARING BASE
	P6203	BALL BEARING 6203ZZ
	P1019Z012	SHAFT
	P1019Z012	KEY 5 x 5 x 30
	PLW01	LOCK WASHER 5/16"
	PSB03	CAP SCREW 5/16"-18 x 1
	P1019Z016	KNOB BOLT 5/16" x 1"
17	PLW06	LOCK WASHER 5%"
18	P1019Z018	PIN 5 x 25
	P1019Z019	JAM NUT <sup>3</sup> / <sub>4</sub> "-16 RH
	P1019Z020	BEARING COVER
	P1019Z021	MOTOR
21	PK34M	KEY 5 x 5 x 20
22	PW02	WASHER %
	PSB06	CAP SCREW 1/4"-20 x 7/8"
	P1019Z025	BAR SETTING PLATE
		SPRING
	P1019Z027	GUARD SLEEVE (L)
	PB12	HEX BOLT 5/16"-18 x 11/4"
	PN08	HEX NUT <sup>3</sup> / <sub>8</sub> "-16
	P1019Z030	GUARD SLEEVE (S)
	PB16	HEX BOLT <sup>3</sup> / <sub>8</sub> "-16 x 1 <sup>1</sup> / <sub>2</sub> "
		SLIDING BRACKET
	P1019Z033	BLADE ADJUSTING SCREW
		KNOB SCREW
		SWITCH PLATE (N/S)
36	P1019Z036	SPRING
	P1019Z037	SQUARE NUT <sup>3</sup> / <sub>8</sub> "-16
	P1019Z038	SHAFT HINGE W/ SHAFT
39	P1019Z039	PHLP HD SCREW <sup>3</sup> / <sub>16</sub> " x <sup>1</sup> / <sub>2</sub> "
40	P1019Z040	STEEL PIN
42	P1019Z042	INNER WHEEL COVER
43	PW06	WASHER 1/4"
44	PS01	PHLP HD SCREW 10-24 x <sup>1</sup> / <sub>2</sub> "
	P6202	BALL BEARING 6202
	P1019Z046	RETAINING RING R35
47	P1019Z047	UPPER WHEEL
48	P1019Z048	WHEEL PROTECTOR
49	P1019Z049	HEX NUT ½" RH
	P1019Z050	BLADE
	P1019Z051	BLADE GUARD
	PSW06	SWITCH 110/220V
	P1019Z053	UPPER WHEEL COVER
	P1019Z054	CATCH KNOB
55	P1019Z055	LOWER WHEEL COVER
	PSS11	SETSCREW 1/4"-20 x 1/4"
	P107383A	JAM NUT <sup>3</sup> /4"-16 LH
	P1019Z058	LOWER WHEEL
59A	P1019Z059A	BELT PULLEY (N/S)

REF	PART #	DESCRIPTION
60A	PVM25	V-BELT M-25 3L250
	P1019Z061	MOTOR PULLEY
	P1019Z062	ECCENTRIC GUIDE POST
	P1019Z063	UPPER SUPPORT BRACKET
64	PN05	NUT <sup>1</sup> /4"-20
	PB05	HEX BOLT 1/4"-20 x 3/4"
	P1019Z066	THUMB SCREW 1/4"-20 x 3/4"
	P1019Z067	UPPER SPACING SLEEVE
	P6200	BALL BEARING 6200
69	P1019Z069	C-RING S10
	P1019Z070	THUMB SCREW 1/4"-20 x 1/2"
71	P1019Z071	SUPPORT BRACKET
72	P1019Z072	GUIDE BLOCK
73	P1019Z073	UPPER BLADE GUIDE
74	PW06	FLAT WASHER 1/4"
75	PLW02	LOCK WASHER 1/4"
	PB51	HEX BOLT 1/4"-20 x 3/8"
77	P1019Z077	TABLE INSERT
	PRP15M	ROLL PIN 3 x 8
	P1019Z079A	TABLE
	P1019Z080	TABLE PIN
	PB35	HEX BOLT 3/8"-16 x 21/2"
	P1019Z082	TRUNNION CLAMP SHOE
	P1019Z083	TRUNNION
	PLW02	LOCK WASHER 1/4"
	P1019Z085	HEX BOLT 1/4"-20 x 5/8"
	P1019Z086	SCALE
	PB12	HEX BOLT <sup>5</sup> /16"-18 x 1 <sup>1</sup> /4"
	PW07	FLAT WASHER <sup>5</sup> /16"
	P1019Z089	TABLE BRACKET
	P1019Z090	POINTER
	PS01	PHLP HD SCREW 10-24 x <sup>1</sup> /2"
	P1019Z092	
	PB60	HEX BOLT <sup>3</sup> / <sub>8</sub> "-16 x 3"
	P1019Z094	LWR SUPPORT BRKT POST
	P1019Z095	SPACER
	P1019Z096	FENCE RAIL
	PSB07M	CAP SCREW M6-1 x 30
	P1019Z098	
	P1019Z099	FENCE ASSEMBLY LOCKING KNOB BOLT
	P1019Z100 P1019Z101A	GAUGE BAR
	P1019Z101A P1019Z102	POINTER
	P1019Z102	POINTER PANHEAD SCREW
	P1019Z105	GAUGE
	P1019Z105	LOCKING BOLT
	P1019Z107	STAND TOP PLATE
	P1019Z108	UPPER SIDE BRACE
	P1019Z109A	LOWER SIDE BRACE
	P1019Z110A	LOWER BRACE
111A	P1019Z111A	STAND LEG
	PCB02	CARRIAGE BOLT 5/16"-18 x 1/2"
	PW07	FLAT WASHER 5/16"
	PLW01	LOCK WASHER 5/16"
	PN02	HEX NUT <sup>5</sup> /16"-18
116	P1019Z116	HEX BOLT 3/8"-16 x 3"
118	PB03	HEX BOLT 5/16"-18 x 1"
130	P1019Z130	RUBBER FOOT

## WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of 1 year to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

#### WARRANTY CARD

Nam	e				
Stree	et				
City					Zip
Phon	e Number	E-Mail		FAX	
MOD	EL # <u>G1019Z 14" B</u>	andsawOrder #_			
The fol	lowing information is given on a vol	untary basis. It will be used for marketi	na nurnos	ses to help us develop better products	and services. Of course, all informa-
	strictly confidential.	untary basis. It will be used for marketing	ng puipos	ses to help us develop better products	
1.	How did you learn about us?				
	Advertisement	Friend	10.	Which hanghtan tools do you awn?	Check all that apply
	Catalog	Card Deck	10.	Which benchtop tools do you own?	Check all that apply.
	World Wide Web			1" x 42" Belt Sander	6" - 8" Grinder
	Other			5" - 8" Drill Press	Mini Lathe
	Other			8" Table Saw 8" - 10" Bandsaw	10" - 12" Thickness Planer Scroll Saw
2.	Which of the following magazines of	do you subscribe to.		Disc/Belt Sander	Spindle/Belt Sander
				Mini Jointer	
	American Woodworker Cabinetmaker	Practical Homeowner Shop Notes		Other	
	Family Handyman	Today's Homeowner			
	Fine Homebuilding	WOOD	11.	How many of the machines checke	d above are Grizzly?
	Fine Woodworking	Wooden Boat	12.	Which partable/band hold power to	ale de you ewn? Cheek all that apply
	—Home Handyman Journal of Light Construction	Woodshop News Woodsmith	12.	which pollable/hand held power too	ols do you own? Check all that apply.
	Old House Journal	Woodwork		Belt Sander	Orbital Sander
	Popular Mechanics	Woodworker		Biscuit Joiner	Palm Sander
	Popular Science	Woodworker's Journal		Circular Saw	Portable Planer
	Popular Woodworking	Workbench		Detail Sander Drill/Driver	Saber Saw Reciprocating Saw
	Other			Miter Saw	Router
3.	Which of the following woodworkin	g/remodeling shows do you watch?		Other	
	Backyard America	The New Yankee Workshop	13.	What machines/supplies would you	like Grizzly Industrial to carry?
	Home Time	This Old House			
	The American Woodworker	Woodwright's Shop		12" Table Saw 12" Jointer	Radial Arm Saw Panel Saw
	Other			Combination Planer/Jointer	Brass Hardware
4.	What is your annual household inc	ome?		Paint & Finishing Supplies	Lumber
				Contractor's Supplies	
	\$20,000-\$29,999	\$60,000-\$69,999		Other	
	\$30,000-\$39,999 \$40,000-\$49,999	\$70,000-\$79,999 \$80,000-\$89,999	14	What now appearing would you li	ke Crizzly Industrial to correct
	\$50,000-\$59,999	\$90,000 +	14.	What new accessories would you lil	ke Grizzly industrial to carry?
_				Builders Hardware	Hand Tools
5.	What is your age group?			Fasteners	Wood Components
	20-29	50-59		Other	
		60-69	15.	What other companies do you purcl	hase your tools and supplies from?
	40-49	70 +	10.		
6.	How long have you been a woodw	orker?			
	0 - 2 Years	8 - 20 Years			
	2 - 8 Years	20+ Years	16.	Do you think your purchase represe	ents good value?
7.	How would you rank your woodwo	rking skills?		Yes	No
	Simple	Advanced			
	Intermediate	Master Craftsman	17.	Would you recommend Grizzly Indu	istrial to a friend?
8.	What stationary woodworking tools	do you own? Check all that apply		Yes	No
0.	What stationary woodworking tools	do you own oncor an that apply.	10	\\/	
	Air Compressor	Panel Saw	18.	in your area? Note: We never use r	e as a reference for Grizzly customers
	Band Saw	Planer			
	Drill Press Drum Sander	Power Feeder Radial Arm Saw		Yes	No
	Dust Collector	Shaper	10	Commenter	
	Horizontal Boring Machine	Spindle Sander	19.	Comments:	
	Jointer	Table Saw			
	Lathe Mortiser	Vacuum Veneer Press Wide Belt Sander			
	Other				
9.	How many of your woodworking m	achines are Grizzly?			

FOLD ALONG DOTTED LINE



Place Stamp Here



GRIZZLY INDUSTRIAL, INC. P.O. BOX 2069 BELLINGHAM, WA 98227-2069

#### 

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Name	 		
Street_	 		
City	 State	Zip	